Business & Applied Technology Division
2016 Assessment of Student Learning Report

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Assessment Activities

Department: Automotive Technology

| SLOs Assessed | | Participation | | Sample Size | Assessment Measures | | | | Scoring Methods | |
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
ASE	2	3	4	105	Quiz/Test/Exam	6	Survey		Rubric	
					Essay/Research Paper		Reflection		Test Score	6
					Oral Presentation		Self-Assessment		Checklist	
					Team-based Project		Peer Assessment		Holistic	
					Portfolio		Interview		Other (specify):	
					Simulation/Demonstration		Completion/Pass Rates			

Department: Business

| SLOs Assessed | | Participation | | Sample Size | Assessment Measures | | | | Scoring Methods | |
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
ACC	2	3	1	100	Quiz/Test/Exam	5	Survey		Rubric	1
ECO	1	2	1	135	Essay/Research Paper		Reflection		Test Score	5
BUS	1		1	32	Oral Presentation	1	Self-Assessment		Checklist	
MAN	1	1	1	19	Team-based Project		Peer Assessment		Holistic	
MAR	1	1		15	Portfolio		Interview		Other (specify):	
					Simulation/Demonstration		Completion/Pass Rates			

Department: Computer Information Systems

| SLOs Assessed | | Participation | | Sample Size | Assessment Measures | | | | Scoring Methods | |
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
CIS	2		1	54	Quiz/Test/Exam	2	Survey		Rubric	
					Essay/Research Paper		Reflection		Test Score	2
					Oral Presentation		Self-Assessment		Checklist	
					Team-based Project		Peer Assessment		Holistic	
					Portfolio		Interview		Other (specify):	
					Simulation/Demonstration		Completion/Pass Rates			

Department: Culinary & Hospitality Studies — Assessment Types

SLOs Assessed		Participation		Sample Size	Assessment Measures				Scoring Methods	
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
CUA	2		3	55	Quiz/Test/Exam		Survey		Rubric	2
					Essay/Research Paper		Reflection		Test Score	
					Oral Presentation		Self-Assessment		Checklist	
					Team-based Project	2	Peer Assessment		Holistic	
					Portfolio		Interview		Other (specify):	
					Simulation/Demonstration		Completion/Pass Rates			

Department: Advanced Manufacturing — Assessment Types

SLOs Assessed		Participation		Sample Size	Assessment Measures				Scoring Methods	
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
CAD	2	1	1	42	Quiz/Test/Exam	3	Survey		Rubric	11
EGG	1	1		13	Essay/Research Paper		Reflection		Test Score	3
ELT	1		1	6	Oral Presentation		Self-Assessment		Checklist	
MAC	2	1	2	21	Team-based Project	3	Peer Assessment	1	Holistic	
MTE	1	1		11	Portfolio		Interview		Other (specify):	
WEL	5		2	46	Simulation/Demonstration	6	Completion/Pass Rates			

Department: Health Information Technology — Assessment Types

SLOs Assessed		Participation		Sample Size	Assessment Measures				Scoring Methods	
Prefix	Count	PT	FT		Direct Type	Count	Indirect Type	Count	Type	Count
HIT	3	1	1	64	Quiz/Test/Exam	3	Survey		Rubric	1
					Essay/Research Paper		Reflection		Test Score	2
					Oral Presentation		Self-Assessment		Checklist	
					Team-based Project		Peer Assessment		Holistic	
					Portfolio		Interview		Other (specify):	
					Simulation/Demonstration		Completion/Pass Rates			

Department: <u>Media Communications</u>					Assessment Types					
SLOs Assessed		**Participation**		**Sample Size**	**Assessment Measures**				**Scoring Methods**	
Prefix	**Count**	**PT**	**FT**		**Direct Type**	**Count**	**Indirect Type**	**Count**	**Type**	**Count**
MGD	2	1	1	21	Quiz/Test/Exam	2	Survey		Rubric	1
					Essay/Research Paper		Reflection		Test Score	2
					Oral Presentation		Self-Assessment		Checklist	
					Team-based Project		Peer Assessment		Holistic	
					Portfolio		Interview		Other (specify):	
					Simulation/Demonstration	2	Completion/Pass Rates			

Assessment Results

Overview & Key Findings

Advanced Manufacturing

Civil Engineering

This will be a full assessment this next calendar year. CSU Pueblo is also assessing similar sustainability knowledge. The goal is to have a general knowledge of sustainability issues from a civil engineering perspective by year two. CSU Pueblo has an expectation of a full understanding and synthesis of knowledge by year four. We are working on adding sustainability knowledge in the following classes:

- AEC102 Residential Design
- AEC121 Construction Materials/Systems
- CON245 Project Management
- EGG102 Introduction to Engineering Methodologies

We need to improve our rubrics. We can measure if our student know the skill but are lacking more definition about how well the students know the work. I would like to see more emphasis on the design process itself. If we could measure better the strengths of the project, we would have a more varied group of scores. We show quite a few 100's and scores that are alike. We will be reassessing next year and we will be looking at our rubrics for better measurements of the results.

Electromechanical

Use more hands on assessment based on the attached rubric and less of the online assessment. The results of this assessment when compared to last year shows an improvement. It was determined we spend more time on Simutech in the classroom to insure all students are able to be more proficient at troubleshooting. We plan to re-assess this again to ensure better data. We will continue to focus on in class Simutech simulations.

This project was completed as a team project. There were discussions about the proper participation as a team member for this assignment. We would like to add more teamwork rubrics to this project. Students felt like parts of the grading was unfair because of undefined expectations. In the future, we will add a participation rubric and more information about what a team member should do. Students felt there should be more labs and hands-on activities, so we are looking to secure more trainers, equipment, and supplies for more hands-on labs and are also encouraging a more structured class with more accountability to the amount of lab time. It was hard to assess how well the students did in a team environment, so the team concept is being further evaluated, and we will re-assess next year.

Machining

The department has received a new certification (NIMS) and have used the certification test as an assessment tool. Results indicated that 80% of students passed the test.

A bolt hole project was used an assessment tool for SLO#7, 100% of students passed the project and the department will use a new project as an assessment tool in the future.
Welding

Traditional and CHAMP students exceeded targets in all 5 SLO assessments. New assessments have been discussed and are being created for AY17. The welding department will have new PSLO's that will align with ISLO's.

Automotive Technology

The results were pre and post testing in all areas of ASE courses. The results show students in ASE 140 which is the first level of 3 sections in the course sequence and is followed by ASE 111 but the third ASE 210 we assessed it to show student growth over all three sections.

We continue to modify our curriculum and testing methods change every semester due to changes in industry. We follow up using CBT computer based training to support the student in additional education and training to assist them with employment and certification. I will be assigning different SLOs next year which will be SLO 3 and 5. We closing the loop on what we feel students need best for educational and employment opportunities with 70% of the students working in industry.

Business, Management, & Marketing
Accounting

From reviewing the results it can be assumed that students in ACC 121 courses need more time and practice with financial statements. It will be recommended that instructors teaching the ACC121 course for future semesters incorporate the financial statements into multiple chapters as opposed to the one single chapter that financial statements are taught from.

This SLO will be re-assessed next academic year. Instructors will document changes to the teaching methods for the financial statements and next year's results will be compared to the current results to determine if the changes are beneficial or if changes need to continue to be made.

Although students from ACC 122 did not meet the goal of 80% of students achieving 80% or greater on assignment questions relating to budget planning and control, the comparison from the Spring to the Fall semester suggest that instructors should continue to spend an increased amount of time on the budgeting chapters. ACC instructors will be coached to continue the practice of allocating more time to the budgeting chapters and the SLO will be assessed in AY2017 to monitor the results.

The increased time spent on budgeting might pose a risk on the comprehension of other chapters, so the other existing SLOs will also need to be monitored throughout AY2017.
Business and Economics We will continue to work with branch campuses and PT instructors to better assure "norming" in scores with respect to the rubrics and assignments used. I plan for Fall of 2017 to require a "standard and uniform assignment and required adoption of a single evaluation scale" to improve accuracy of data. We will reassess the same SLO as it is central that all business students acquire this skill and ECO 201 is taken by all majors whether AA or AAS degrees.

Only 1 student who took assessment failed to attain the goal of 80%. We believe an increase focus on reviewing ratio analysis in MAN 225 to Supplement ACC 121 has directly led to improved performance year over year. We will use this class as a model going forward as both instructors used the same assignments and methodology for grading and added an emphasis on the solving problems to the course. One factor that may have contributed to the

results is the low class sizes for both sections, providing more individual instruction time for each student.

The goal in previous years was set at 80% of students will achieve an 80% score or higher. In 2016 we raised this to 80 percent of students will achiev a score of 85% or higher. We did noot make the goal. Only 68.8% of students met the new higher standard. As the chair and faculty teaching the course I believe the increased difficulty inherent in the assignment is largely responsible for the missing of the goal. I intentially raised the bar on students by adding several evalautive and inference questions to the problem sets. The way I which I graded and assigned points tells me they can cacluate and solve problems at the same or slightly higher effacacy but we really just set a new baseline for the 2017 assessment period based on expansion of skills being assesed and the higher level thinking required to get there.

78.6% Percent of student achieved an 80% or better slightly below goal. This however was affected by several students not submitting or presenting. 90% of those student who completed assignment and presented earned above 85% or better.

Computer Information Systems

This section of the course includes a hands on activity where the students estimate the storage needs for a data conversion project and then solve for the amount of time the project will take to complete. This covers both the application of computers to business and project analysis.

Database topics (Microsoft Access) is the most difficult of all the Microsoft Products to teach. Working with a sample database and guided lessons in the class have improved scores on this topic over the last few semesters.

Culinary & Hospitality Studies

AY16 SLO targets were exceeded due to a change in Faculty for the assessment. The department will use new assessment tools for the AY17 PSLO. Major changes are coming for CUA in the way of new classes, new PSLO and new rubrics that will be used for assessment. The previous rubrics were deemed to be too narrow and difficult to assess.

Health Information Technology

Due to faculty change, Assessment will only be reported for Fall 2016 semester. Class size was 16 students, and assessments were attempted by 14-15 students.

At MIDTERM, 14 of 16 students completed the Audio Assessment. 92.9% of the students who completed the Audio Assessment met or surpassed the Target Performance rate of 70%, in their ability to pronounce medical terms at a satisfactory level.

At FINAL, 15 of 16 students completed the Audio Assessment. 93.3% of the students who completed the Audio Assessment met or surpassed the Target Performance rate of 70%, in their ability to pronounce medical terms at a satisfactory level.

With the Full Time Faculty Instructor, modifications have been made to the class, to provide the student with additional opportunities to work on pronunciation, including:

1. As a Supplement, students are encouraged to work with Flash Cards provided through their student course book/CD; or, if not accessible through Wikipedia.

2. Assignment requiring students to segment medical terms by term components (prefix, root word, suffix)
3. Reinforce student pronunciation through Synchronous Sessions, which additionally include student to student/student to instructor verbalization of medical terms.

As we reviewed scoring against the goal of 70% of students seeing a minimum of 15-20% increase in scoring, we did not meet our goal. Improvement was seen in 18 of 29 students (62%) vs. the projected goal of 20 of 29 students (70%). Though the goal was not fully met, we did note that at **pre-test**, only 21% of students (6) were at the 70 percentile for scoring and at **post-test** 52% of students (15) were at the 70 percentile. And, an average improvement for the entire group was 20.86%.

The areas of most difficulty for students were in Registries and HIT/HIM acronyms.

Media Communications

MGD 111 Adobe Photoshop

Students in the MGD 111 Adobe Photoshop course were assessed in the 2016 academic year. Students enrolled in the Spring semester where assessed prior to instruction and again at semester mid-term. It was expected to complete this in the Fall of 2016. However, due to low enrolment the course was canceled. There will be no evidence to compare within the 2016 calendar year.

Approximately seven to eight weeks of instructions was administered at the time of the mid-term exam. The exam was identical to the pre-test assessment administered at the beginning of the semester. Based on 2015 assessment results, the exam was re-developed to use the correct industry reference material and has been updated to reflect the Adobe Certification language related to the certified testing. The exam is considerably more difficult than previous years.

The pre-test would not impact the students overall grade, but provide the instructor with a gage of current skills. As the instructor, I was able to determine the variety of skills based on the benchmark performance of students. MGD111 Adobe Photoshop continues to have an extreme range of experience and non-experience with the software.

The mid-term exam was administered mid-semester in an attempt to measure full synthesizing of more complex concepts, students show a marked increase of understanding the technology required by the industry. By administering these tests early in the semester and examining individual question statistics the instructor can finish the remaining contact hours making adjustments and furthering learning opportunities to address weaknesses in the program specific requirements.

Spring 2016

Seven of ten students enrolled completed the benchmark pre-test. The Class average was a 34.36% of the total available points. Individual results showed 50.6% as the highest average and 0% as the lowest average within the class. Based on consistent information collected in previous administration of the exam the instructor developed a series of "Study Guides". These guides where provided to students based on areas of focus and provide study guides that would assist in understanding the required concepts.

MGD 141

Students were already performing at an average of 80.29% when provided the practice quiz. The Quiz was administered formally in class and showed an increase in performance to a 92.8% average.

Fall 2016

Practice Quizzes where administered prior to instruction, and the Assessment Quiz was administered following instruction. The content is relevant to the course learning outcomes as defined by CCCS.

Use of Results

Department	Number of SLOs Assessed	Performance Targets Achieved	Number to be Reassessed	If not achieved, % below target
Business (incl. MAN/MAR)	6	2	6	12%-18%
Automotive Technology	2	0	2	1%-8%
Computer Information Systems	2	2	2	
Culinary & Hospitality	2	2	2	
Advanced Manufacturing	12	12	11	5%
Health Information Systems	3	2	3	8%
Visual Communication	2	1	2	12%
Totals	29	21	28	

Improvement Plans (Closing the Loop)

Advanced Manufacturing

Civil Engineering

SLO#4: This is a pre and post test that students take on sustainability. Only pre test results are given because the department is changing to a calendar year assessment cycle consistent with the institution. AY17 will include these results which is on course with assessment that CSU-P is performing on sustainability.

SLO#1: The department will work on rubric development that should yield more accurate results for the team based project. Focus on the process will be the goal of the update. This SLO will stay the same.

Electromechanical

SLO#7: A more hands on approach was used in teaching students to demonstrate knowledge and skills. Simutech was used to achieve this and resulted in higher test scores. A continuation of these methods will be used in the next cycle.

SLO#5: Undefined expectations of the team based project led to students being frustrated with grading. A participation rubric will be used next cycle to evaluate the function of team participation. This assessment will be used in the next cycle.

Machining

SLO#3: The NIMS certification test will be the tool to assess this SLO. Faculty will attempt to get specific results about student answers so they can focus instruction on weak areas of student performance.

SLO#7: The bolt hole project used for assessment indicated mastery by students, and a different tool will be used for AY 17.

Welding

SLO#1,2,3,4,5: Targets met and exceeded for all AY16 PSLO. The department will have new PSLO's that will align with ISLO for AY17.

Automotive Technology

New PSLO's have been developed and CBT will be used to assess these areas. Continuation of Pre and Post test ensures the department has good data to close the loop each semester.

Business, Management, & Marketing

Accounting

SLO#1: Teaching financial statements will be spread over the entire semester instead of one chapter in the book.

SLO#2: 4 days of instruction will be used as opposed to 2.

Business and Economics

SLO#1: Work will commence on a norming of the rubric used to grade the essay question used for assessment.

SLO#4: Changes to curriculum in ACC 121 and MAN 225 have helped to increase this score. The department will try to recreate the same successes next assessment cycle.

SLO#5: This goal was not met on this SLO, the chair will add an assignment to help supplement the test question that is used for assessment. 68% were able to meet the goal and thus an increase to 75% will be the new goal for 2017.

SLO#6: Changes were made this assessment cycle. This is data from one class so another cycle is needed to assure validity of data before any proper analysis can be made.

Computer Information Systems

SLO#1: Guided lessons and sample databases have improved scores. Another assessment cycle will be used to add validity to the results.

SLO#2: No changes will be made for next assessment cycle.

Culinary & Hospitality Studies

PSLO's were reviewed and new rubrics will be used that align with ISLO. Professionalism will be a focus of AY17.

Health Information Technology

SLO#1: This SLO and the corresponding assessment are part of the CCA professional credential that students can acquire through a passing score on the exam. This is a benchmark for the program and will continue to be assessed. A 90% pass rate was achieved AY16.

SLO#4: This SLO will be reassessed for the next cycle. Focus will be on duplicating the success of the teaching methodologies of AY17. A change in faculty could be a challenge in mimicking results.

SLO#3 Reassessment of this SLO will continue, the goal of 70% was not met AY16. Identified areas of poor performance will receive increased teaching opportunities and activities.

Media Communications

SLO#1: While an increase of pre and post test scores were achieved, the average score fell below the 80% mark. The SLO will be assessed again for AY17. Modification in delivery and content are being developed to increase test scores.

SLO#2: Targets were achieved and exceeded. The SLO will be reassessed for AY17 with increased D2L content being developed.

Machining

SLO#3: The NIMS certification test will be the tool to assess this SLO. Faculty will attempt to get specific results about student answers so they can focus instruction on weak areas of student performance.

SLO#7: The bolt hole project used for assessment indicated mastery by students, and a different tool will be used for AY 17.

Welding

SLO#1,2,3,4,5: Targets met and exceeded for all AY16 PSLO. The department will have new PSLO's that will align with ISLO for AY17.

Challenges & Successes

Dept.	Challenges	Successes to Celebrate	Recommendations/Comments
ASE	Industry changes necessitating frequent modification to curriculum and testing methods	• Increase in scores on all SLOs	Track each semester and compare rates for more longitudinal data.
BUS	• Fall and Spring schedule differences • Instructors at multiple campuses.	• Increase in SLO#2 • Higher scores because of changes this assessment cycle.	Norm rubrics for all instructors.
CIS	MS Access difficult to teach	Increase in scores for SLO 1	Increase sample sizes and track more longitudinal data.
CUA	New Class Structure	Program Changes	Norm rubrics for all instructors.
HIT	New Faculty, Industry Acronyms	SLO#4 exceeded target	Norm rubrics for all instructors and continue to track longitudinal data.
MTE	• Team project • Rubrics • New Certification, Assessment tools • New PSLO's	• Increase in scores • Students are high performing • Student success in both assessments • All targets exceeded	• Use ISLO rubric for professionalism when evaluating participation. • Norm PSLO rubric to ISLO Rubrics. Use the Teamwork rubric and tailor to the project. • Create department rubrics for both assessments. • Simplify the reporting process.
VMC	Changes to Curriculum	Target achieved	Changes to the assessment for SLO#2. Target was exceeded.